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III. The Immersions and Emerisions of the four Satellites of Jupiter, for the Year 1738. computed to the Meridian of the Royal Observatory at Greenwich, by James Hodgson, F. R. S. and Master of the Royal Mathematical School at Christ's Hospital, London.

ECLIPSES of the first Satellite of JUPITER.

D. H. M.	D. H. M.	D. H. M.
JANUARY.	FEBRUARY.	MARCH.
Emersions.	Emersions.	
3 5 16 M 4 11 45 A 6 6 13 A 8 0 41 A 10 7 10 M 12 1 38 M 13 8 6 A 15 2 35 A 17 9 3 M 19 3 32 M 20 10 0 A 22 4 29 A 24 10 57 M 26 5 26 M 27 11 55 A 29 6 24 A 31 0 53 A	2 7 21 M 4 1 50 M 5 8 19 A 7 2 48 A 9 9 17 M 11 3 46 M 12 10 15 A 14 4 44 A 16 11 13 M 18 5 42 M 19 12 11 A 21 6 41 A 23 1 10 A 25 7 39 M 27 2 8 M	On the 15th of March Jupiter and the Sun will be in Conjunction.
		APRIL.
		Immersions.
		10 11 38 M 12 6 7 M 14 0 36 M 15 7 5 A 17 1 34 A 19 8 3 M 21 2 32 M

ECLIPSES of the first Satellite of JUPITER.

D.	H.	M.		D.	H.	M.		D.	H.	M.
22	9	1 A					JUNE.	11	0	17 A
24	3	30 A						13	6	46 M
26	9	58 M					Immersions.	15	1	14 M
28	4	27 M						16	7	42 A
29	10	56 A		2	1	55 A		18	2	11 A
				3	20	24 A		20	8	40 M
			MAY.	6	2	52 M		22	3	8 A
				7	9	20 A		23	9	37 A
			Immersions.	9	3	48 A		25	4	6 A
				11	10	16 M		27	10	34 M
1	5	24 A		13	4	44 M		29	5	3 M
3	11	53 M		14	11	13 A		30	11	32 A
5	6	22 M		16	5	41 A				
7	0	50 M		18	0	9 A				
8	7	19 A		20	6	37 M				
10	1	47 A		22	1	5 M				
12	8	16 M		23	7	34 A	AUGUST.			
14	2	44 M		25	2	2 A	Immersions.	1	6	1 A
15	9	13 A		27	8	30 M		3	0	29 A
17	3	41 A		29	2	59 M		5	6	58 M
19	10	9 M		30	9	27 A		7	1	27 M
21	4	38 M						8	7	56 A
22	11	6 A						10	2	25 A
24	5	34 A						12	8	54 M
26	0	3 A						14	3	23 M
28	6	31 M						15	9	52 A
30	0	59 M		2	3	55 A		17	4	21 A
31	7	27 A		4	10	24 M		19	10	50 M
				6	4	52 M		21	19	5 M
				7	11	20 A		24	6	18 A
				9	5	49 A		26	0	47 A

ECLIPSES of the first Satellite of JUPITER.

D.	H.	M.		D.	H.	M.		D.	H.	M.
28	7	16 M						17	7	34 A
30	1	45 M						19	2	2 A
31	8	14 A		8	2	36 M		21	8	30 M
SEPTEMBER.				9	9	5 A		23	2	59 M
Immersions.				11	3	34 A		24	29	27 A
				13	10	2 M		26	3	55 A
				15	4	31 M		28	10	23 M
				16	11	0 A		30	4	55 M
1	2	44 A		18	5	29 A		DECEMBER.		
4	9	13 M		20	11	58 M				
6	3	42 M		22	6	27 M				
7	10	11 A		24	0	56 M		Emersions.		
9	4	40 A		25	7	24 A				
11	11	10 M		27	1	53 A		1	11	19 A
13	5	39 M		29	8	22 M		3	5	47 A
15	0	8 M		31	2	50 M		5	0	15 A
16	6	37 A						7	6	43 M
18	1	7 A						9	1	11 M
20	7	36 M						10	7	39 A
22	2	5 M						12	2	7 A
23	8	34 A						14	8	35 M
25	3	3 A		1	9	19 A		16	3	3 M
27	9	32 M		3	3	47 A		17	9	31 A
29	4	2 M		5	10	16 M		19	3	59 A
30	10	11 A		7	4	44 M		21	10	27 M
				8	11	13 A		23	4	56 M
OCTOBER.				10	5	41 A		24	11	23 A
Immersions.				12	0	9 A		26	5	51 A
				14	6	38 M		28	0	19 A
				16	1	6 M		30	6	48 M
2	5	0 A								
4	11	29 M								
6	5	58 M								

ECLIPSES

ECLIPSES of the second Satellite of JUPITER.

D.	H.	M.	D.	H.	M.	D.	H.	M.
JANUARY.			APRIL.			AUGUST.		
Emersions.			Immersions.			Immersions.		
2	0	59 M	11	11	6 M	17	11	46 A
5	2	17 A	15	0	25 M	21	1	4 A
9	3	34 M	18	1	44 A	25	2	21 M
12	4	52 A	22	3	3 M	28	3	39 A
16	6	9 M	25	4	21 A			
19	7	27 A	29	5	40 M			
23	8	45 M						
26	10	4 A						
30	11	22 M						
FEBRUARY.			MAY.			SEPTEMBER.		
Emersions.			Immersions.			Immersions.		
3	0	41 M	2	6	58 A	16	10	7 M
6	1	59 A	6	8	16 M	19	11	25 A
10	3	18 M	9	9	34 A	23	0	44 A
13	4	37 A	13	10	52 M	27	2	2 M
18	5	56 M	17	0	10 M	30	3	20 A
20	7	14 A	20	1	27 A			
24	8	34 M	24	2	45 M			
27	9	54 A	27	4	2 A			
			31	5	20 M			
MARCH.			JUNE.			OCTOBER.		
On the 15th of March Jupiter and the Sun will be in Conjunction.			Immersions.			Immersions.		
3	6	37 A	3	6	37 A	13	8	35 A
7	7	55 M	7	7	55 M	17	9	54 M
10	9	12 A	10	9	12 A	20	11	13 A
			14	10	29 M	24	0	33 A
						28	1	52 M
						31	3	11 A

SEPTEMBER.

ECLIPSES of the second Satellite of JUPITER.

D.	H.	M.	D.	H.	M.	D.	H.	M.
SEPTEMBER.			Emersions.			21 11 53 M		
Immersions.			9	8	17 A	26	1	10 A
4	4	31 M	13	9	36 M	28	2	27 A
7	5	50 A	16	10	54 A	DECEMBER.		
11	7	9 M	20	0	13 A	Emersions.		
14	8	29 A	24	1	31 M	2	3	44 M
18	9	48 M	31	4	8 M	5	5	1 A
21	11	7 A	NOVEMBER.			9	6	18 M
25	0	27 A	Emersions.			12	7	35 A
29	1	46 M	3	5	26 A	16	8	52 M
OCTOBER.			7	6	43 M	19	10	9 A
Immersions.			10	8	1 A	23	11	26 M
2	3	5 A	14	9	19 M	27	0	43 M
6	4	24 M	17	10	36 A	30	2	0 A

ECLIPSES of the third Satellite of JUPITER.

D.	H.	M.	D.	H.	M.	D.	H.	M.
JANUARY.			MARCH.			MAY.		
Immersions.			Immersions.			Immersions.		
8	11	48 M	March the 15th			3	4	34 M
15	3	48 A	Jupiter and the			10	8	35 M
22	7	49 A	Sun will be in			17	0	36 A
			Conjunction.			24	4	36 A
						31	8	36 A
Emerisions.			Emerisions.			Emerisions.		
8	2	39 A				3	7	9 M
15	6	38 A				10	11	10 M
22	10	38 A				17	3	9 A
30	2	39 M				24	7	9 A
			APRIL.			31	11	8 A
FEBRUARY.			Immersions.			JUNE.		
Immersions.						Immersions.		
			11	4	27 A	8	0	36 M
			18	8	30 A	15	4	35 M
			26	0	33 M	22	8	35 M
			Emerisions.			29	0	35 A
Emerisions.						Emerisions.		
6	6	41 M				8	3	6 A
13	10	43 M				15	7	5 M
20	2	45 A				22	11	4 M
27	6	48 A				29	3	3 A

JULY.

ECLIPSES of the third Satellite of JUPITER.

D. H. M.	D. H. M.	D. H. M.
JULY.	SEPTEMBER.	NOVEMBER.
Immersions.	Immersions.	Immersions.
6 4 35 A 13 8 36 A 21 0 37 M 28 4 38 M	2 0 53 M 9 4 57 M 16 9 0 M 23 1 4 A 30 5 6 A	5 1 18 A 12 5 18 A 19 9 18 A 27 1 17 M
Emersions.	Emersions.	Emersions.
6 7 3 A 13 11 2 A 21 3 2 M 28 7 3 M	2 3 14 M	5 3 33 A 12 7 33 A 19 11 32 A 27 3 31 M
AUGUST.	OCTOBER.	DECEMBER.
Immersions.	Immersions.	Immersions.
4 8 40 M 11 0 43 A 18 4 46 A 25 8 49 A	7 9 11 A	4 5 16 M 11 9 14 M 18 1 13 A 25 5 12 A
Emersions.	Emersions.	Emersions.
4 11 5 M 11 3 6 A 18 7 9 A 25 11 11 A	7 11 28 A 15 3 30 M 22 7 32 M 29 11 33 M	4 7 29 M 11 11 28 M 18 3 26 A 25 7 24 A
R r 2		January

January the 1st, at 8 h. 28 m. in the Evening, the fourth *Satellite* of *Jupiter* will Immerge into the Shadow, and at 9 h. 49 m. it will Emerge out of the Shadow.

Again, on the 18th Day there will be an Immersion at 2 h. 55 m. in the Afternoon, and at 3 h. 48 m. the Emer-
sion will happen.

Again, on the 4th of *February*, at 9 h. 31 m. in the Morning, the fourth *Satellite* will Immerge into the Shadow of *Jupiter*, and at 9 h. 44 m. the same Morning, it will Emerge out of the Shadow.

And after this Time, the fourth *Satellite* will pass wide of the Shadow till the 24th Day of *June* 1740; when the Immersion will happen at 8 h. 43 m. in the Evening, and the Emer-
sion at 10 h. 15 m. the same Evening.